

# Gefentv<sup>®</sup>



**HDMI**<sup>®</sup>  
HIGH-DEFINITION MULTIMEDIA INTERFACE

**1080P**  
PROGRESSIVE

## **Wireless for HDMI** In-Room Solution

**GTV-WHD-1080P-SR**  
User Manual

**gefentv.com**



## ASKING FOR ASSISTANCE

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### Notice

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**Rev A5**

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# INTRODUCTION

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Congratulations on your purchase of the GefenTV Wireless for HDMI. Your complete satisfaction is very important to us.

## About Gefen

We specialize in total integration for your home theater, while also focusing on going above and beyond customer expectations to ensure you get the most from your hardware. We invite you to explore our distinct product line. Please visit <http://www.gefen.com> for the latest offerings in High-Definition signal solutions or call us between the hours of 8:00 am and 5:00 pm Monday-Friday, Pacific Standard Time for assistance with your A/V needs. We'll be happy to assist you.

## The GefenTV Wireless for HDMI In-Room Solution

The GefenTV Wireless for HDMI In-Room Solution sends high definition audio and video to any HDTV display up to 80 feet (25 meters). It extends HDMI A/V content from computers using HDMI, set-top boxes, Blu-ray players, and other A/V sources to remote HDMI-compliant display(s). This wireless product is comprised of a small Sender unit and one table-top Receiver unit. It supports HD resolutions up to 1080p Full HD along with support for up to 7.1 channels of LPCM, and up to 5.1 channels of Dolby® TrueHD, and DTS-HD Master Audio™. The Wireless for HDMI In-Room Solution transmits within the room and does not require line-of-sight placement of transceivers for good reception. Thanks to its small form-factor and easy to plug in Sender unit, this product is ideal for high-definition A/V extension within a conference room or home theater installation that requires the quick addition of portable devices such as a presentation laptop computer or a video camera to an existing A/V system. Additional features allow multiple Sender units where each display can access up to eight sources, using the included handheld remote control.

## How It Works

Plug the Sender unit directly into the HDMI output of the source. Connect the included HDMI cable from the Receiver unit to the HDTV display. When using a PC as the source, connect the supplied USB-to-mini-USB cable from the PC to the Sender unit. When using sources that do not have an available powered USB port, you will need to use the provided USB power supply. Connect the other power supply to the DC jack on the back of the Receiver unit. Connect the power supplies to available electrical outlets. Power-up the source and the display. Within approximately one minute, the "Video" indicators on both units should now glow solid blue to indicate a successful connection between the Sender and Receiver unit. If the Sender and Receiver units do not pair automatically, the LEDs on the Sender will continue to blink. Navigate through the on-screen menu and have the Receiver unit look for a Sender unit. If the remote is not available, you can press and hold the recessed pairing button on the Receiver with a paper clip until its Link LED stops blinking and goes dark. Press and hold the pairing button on the Sender unit until the Link LED stops blinking and goes dark. If navigating the menu using the remote, press the OK button on the IR remote. A message indicating that the Sender and the Receiver units have been paired will appear on the display.

## FCC STATEMENT

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This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

### INSTRUCTION TO THE USER

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and Receiver unit
- Connect the equipment into an outlet on a circuit different from that to which the Receiver unit is connected
- Consult the dealer or an experienced radio/TV technician for help.

In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of the manufacturer could void the user's authority to operate this equipment.

## OPERATION NOTES

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### READ THESE NOTES BEFORE INSTALLING OR OPERATING THE GEFENTV WIRELESS FOR HDMI - IN-ROOM SOLUTION

- Maximum extension distance is 80 feet (25 meters) with a clear line-of-sight.
- Supported resolutions:
  - » 1080p60, 1080p50, 1080p24, 1080i60, 1080i50, 720p60, 720p50, 576p50, 576i50, 480p60, 480i60
  - » VESA: 1600x1200, 1366x768, 1280x1024, 1024x768, 800x600, 640x480)
- Obstructions such as walls and furniture may reduce performance and reception distance.
- DVI-D Support
- Gefen recommends placing both units into the provided stands, with the Gefen logo pointing down, to help maintain the strongest possible transmission signal.
- Interference caused by other RF products may reduce performance and reception distance.
- Use with multiple Sender units:
  - » Can be used with a single Receiver unit to provide source-switching capability.
  - » Up to 8 Senders are supported. Local RF interference can limit the number of Sender units that can be used. Each Sender unit needs to be placed at least 1 meter apart for optimum performance.
  - » US Models: Up to 4 pairs of Sender and Receiver units can be operated in the same environment. Local RF interference can limit the number of units that can be used. Each Sender unit needs to be placed at least 1 meter apart for optimum performance. If additional Sender / Receiver pairs are to be used, each set of units must be placed beyond the reception range (80 feet / 25 meters) of the other in order to prevent interference.

Continued on next page

## OPERATION NOTES

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- » EU Models: Up to 2 pairs of Sender and Receiver units can be operated in the same environment. Local RF interference can limit the number of units that can be used. Each Sender unit needs to be placed at least 1 meter apart for optimum performance. If additional Sender / Receiver pairs are to be used, each set of units must be placed beyond the reception range (80 feet / 25 meters) of each other in order to prevent interference.
- IR back-channel compatibility:
  - » Only products with 38 kHz IR carrier frequency are compatible. If in doubt, please check with the equipment manufacturer.
  - » Due to complexity in some manufacturers' IR codes, not all 38kHz IR devices may be compatible with the IR Back Channel of the Wireless for HDMI. The following brands have been tested by Gefen: Panasonic, Sony, and Samsung.
- Operational Limitations:
  - » Regarding US and EU models, note that all RF devices are designed by compliance regulation to accept interference from all other devices. Operation of wireless products is therefore dependent on the environment they are in. Other RF products, even ones that seemingly might not be in the frequency range, do create harmonics and other artifacts that could interfere with the operation of the Wireless for HDMI.



# FEATURES

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## HDMI Features Supported

- Resolutions up to 1080p Full HD
- 12-bit Deep Color
- Linear PCM digital audio up to 7.1 channels
- Dolby® TrueHD, Dolby® Digital Plus, and DTS-HD Master Audio™ up to 5.1 channels
- 3DTV pass-through
- HDCP pass-through
- Lip Sync pass-through

## Features

- Wireless extension of HDMI up to 80 feet (25 meters)
- Uncompressed High-Definition A/V from source to display
- No latency
- Included IR remote allows sequential switching between up to 8 sources/ Sender units. It also features three direct access buttons for your most frequently used sources.
- WHDI 1.0, FCC Part 15, and ETSI-compliant

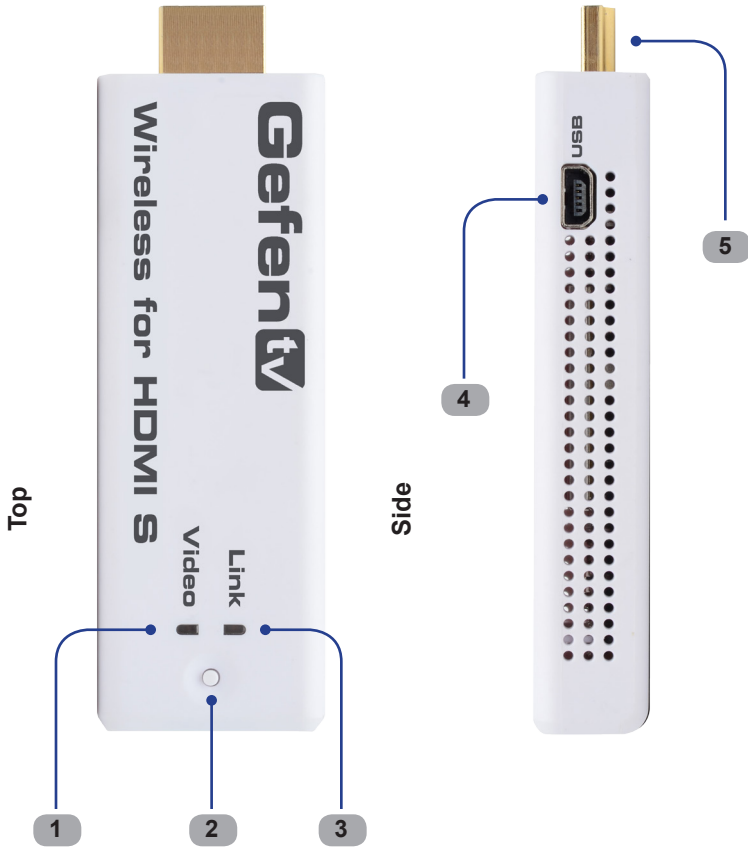
## Package Includes

- (1) Wireless for HDMI In-Room Solution - Sender unit
- (1) Wireless for HDMI In-Room Solution - Receiver unit
- (1) 5 ft. HDMI cables (M-M)
- (1) USB to Mini-USB cable
- (1) IR Remote Control
- (1) Cradle for Receiver unit
- (1) 5V / 1A DC Power Supply (Sender)
- (1) 5V / 2A DC Power Supply (Receiver)
- (1) Quick Start Guide

All features and specifications are subject to change without notice.

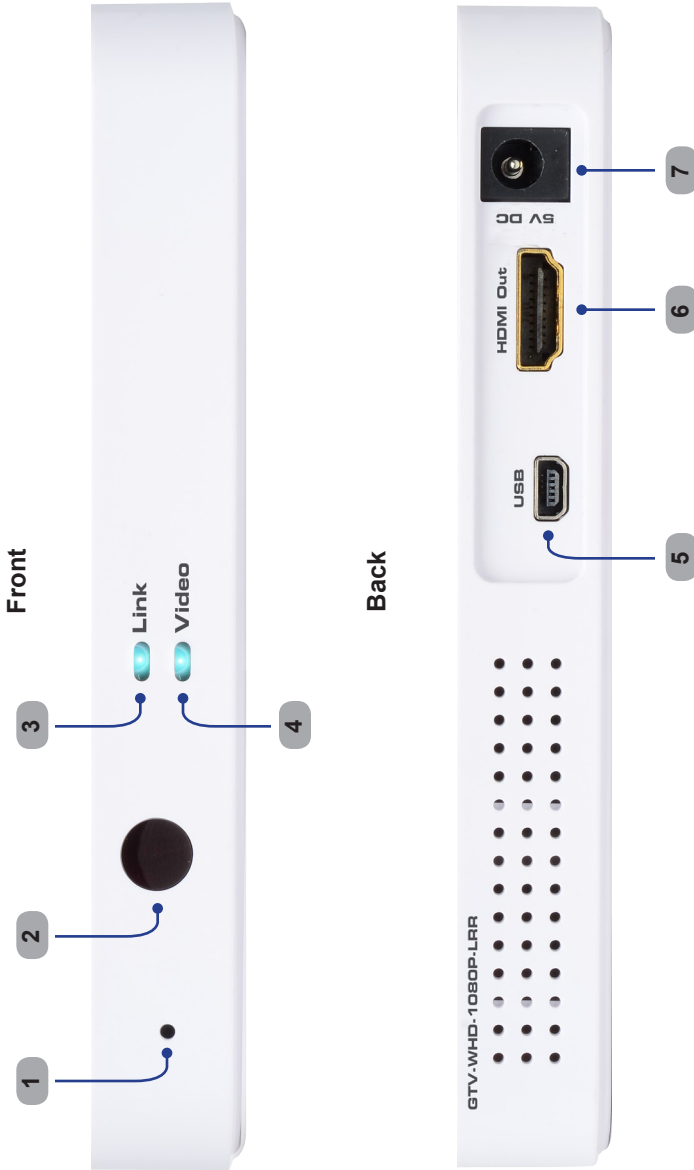
# PANEL LAYOUT

## Sender unit



# PANEL LAYOUT

## Receiver unit



## PANEL DESCRIPTIONS

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### Sender Unit

- 1 Video**  
This LED indicator will glow bright blue once a video link is established between the Sender unit and the Receiver unit.
- 2 Pairing button**  
Press and hold this button for 3 seconds to pair the Sender unit with the Receiver unit.
- 3 Link**  
This LED indicator will glow bright blue once a link is established between the Sender unit and the Receiver unit.
- 4 USB**  
Connect the included USB to Mini-USB cable from the computer to this Mini-B port.
- 5 HDMI Connector**  
Connect the Sender unit to a Hi-Def source using this HDMI connector.

### Receiver Unit

- 1 Pairing button**  
Press and hold this recessed button using a paper clip for approximately 3 seconds to pair the Sender unit with the Receiver unit.
- 2 IR Sensor**  
Receives IR commands from the included IR Remote Control unit and the IR remote of the source unit to be controlled.
- 3 Link**  
This LED indicator will glow bright blue once a link is established between the Receiver unit and the Sender unit.
- 4 Video**  
This LED indicator will glow bright blue once a video link is established between the Receiver unit and the Sender unit.
- 5 USB**  
Mini-USB service port (for factory use only).
- 6 HDMI Out**  
Connect the included HDMI cable from this connector to an HD display.
- 7 Power**  
Connect the included 5V DC power supply to this receptacle.

# IR REMOTE CONTROL UNIT

## Layout and Descriptions



- 1 Menu**  
Press this button to display the Setup menu.
- 2 Cursor buttons**  
Used to control Left, Up, Right, and Down cursor motion within a menu system.
- 3 OK**  
Press this button to accept the current operation or menu selection.
- 4 Delete**  
When using multiple Sender units, press this button to delete a Sender unit from the wireless network.
- 5 Input Devices**  
When using multiple Sender units, use these buttons to select any of the first three linked Sender units. Use the Source button to select Senders 4 - 8.
- 6 Guest**  
Powers down the wireless system.
- 7 Add**  
When using multiple Sender units, press this button to add a Sender unit (source).
- 8 Exit**  
Press this button to cancel an operation or exit any menu system.
- 9 Source**  
When using multiple Sender units (sources), press this button to select a different Sender unit.

# CONNECTING THE WIRELESS FOR HDMI

## How to Connect the Wireless for HDMI In-Room Solution

1. Connect the Sender unit directly to the HDMI port of the Hi-Def source.
2. Connect an HD display or projector to the Receiver unit using the included HDMI cable

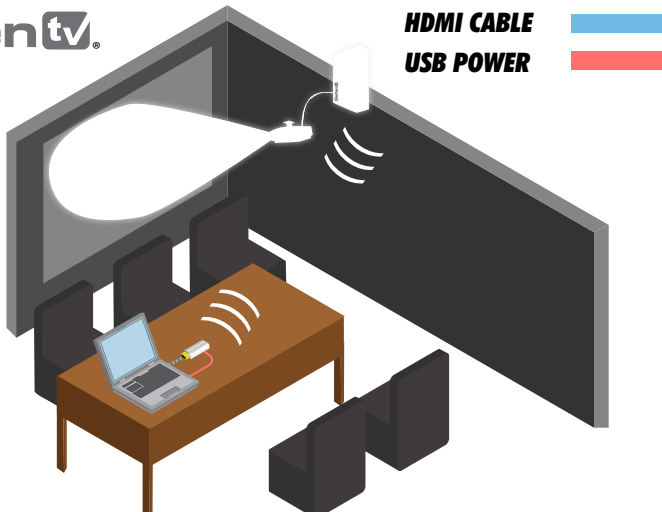


**NOTE:** The *Wireless for HDMI In-Room Solution* does not support DVI devices.

3. Connect the included USB to Mini-USB cable from a USB port on the computer to the Mini-B connector on the Sender unit. If the source does not have a powered USB port, connect the included mini-USB to USB cable to the Sender and to the included USB power supply. Connect this power supply to an available electrical outlet.
4. Connect the included 5V DC power supply to the Receiver unit and connect the power supply to an available electrical outlet.
5. The Link and Video LED indicators on both the Sender and Receiver unit will glow bright blue to indicate a successful connection between the Sender and Receiver unit. Ordinarily, no pairing is required out of the box. However, the Sender and Receiver can also be paired manually if needed.

## Wiring Diagram for the Wireless for HDMI In-Room Solution

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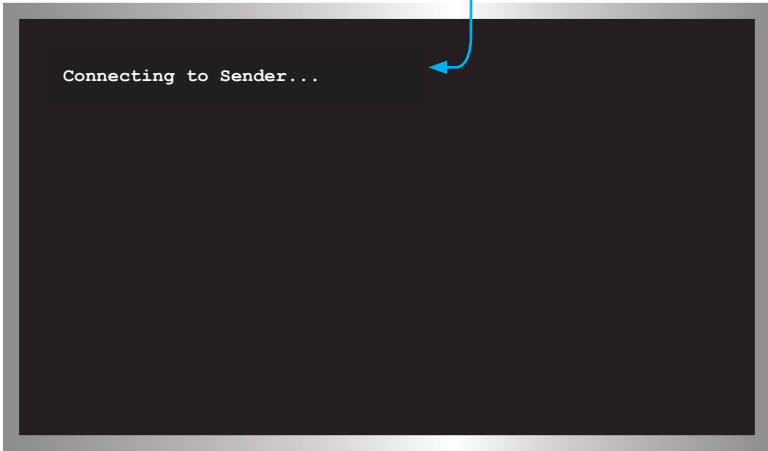
# OPERATING THE WIRELESS FOR HDMI

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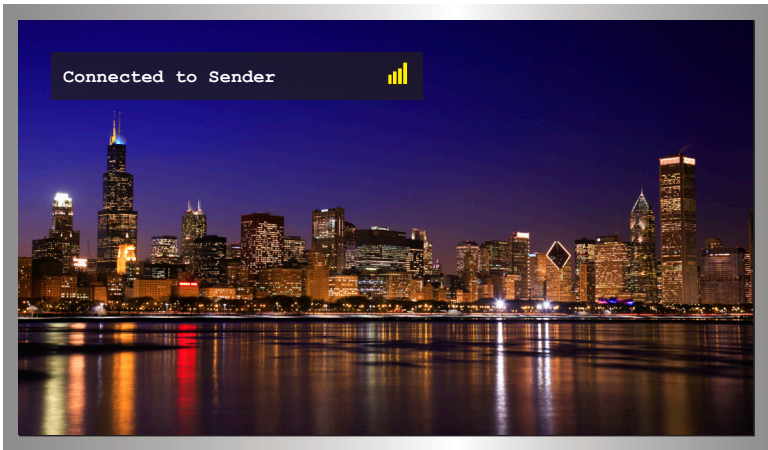
## The Linking Process

After all the connections have made (see page 10) to the *Wireless for HDMI*, the Receiver unit will attempt to negotiate with the Sender unit.

**Status Message**  
Provides information on the current status of the *Wireless for HDMI*



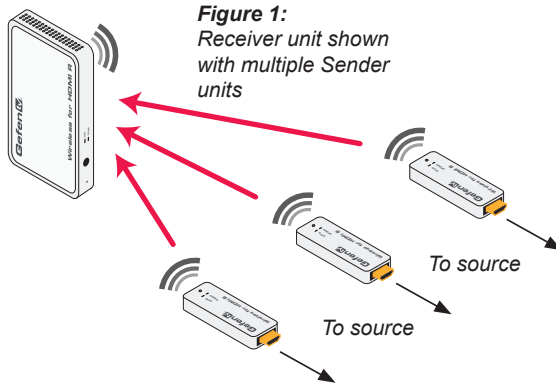
After a few moments, the source signal will appear on the display. The status message will disappear after a few seconds.



# OPERATING THE WIRELESS FOR HDMI

## Using Multiple Sender Units

The *Wireless for HDMI* can be used with multiple Sender units to provide switching capability between up to eight Sender units.



## Adding a new Video Source

Before adding a secondary Sender unit to the *Wireless for HDMI* network, make sure that a single Sender / Receiver pair function correctly.

1. Connect the Sender unit to a Hi-Def source using an HDMI cable.
2. Connect the power supply to the Sender unit.
3. Point the IR Remote Control at the Receiver unit and press the **MENU** button. The Setup menu will be displayed.



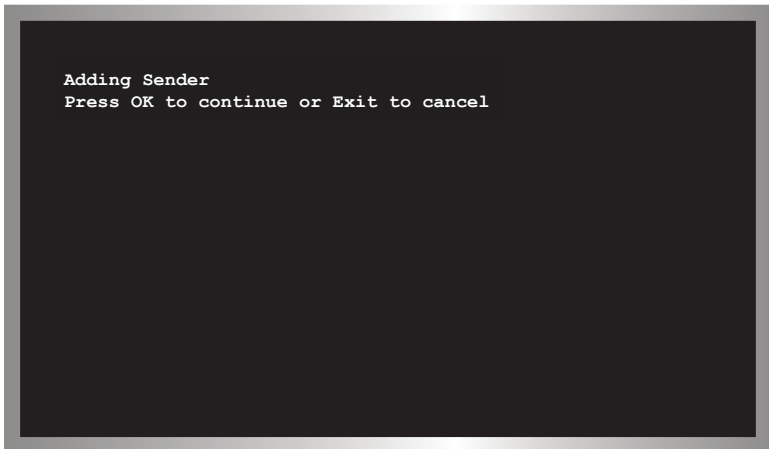


## OPERATING THE WIRELESS FOR HDMI

4. Use the cursor buttons on the IR Remote Control to select *Add new Video Source* from the Setup menu.
5. Press the **OK** button. The following message will be displayed:



6. Press and hold down the Pairing button (see pages 6 - 8) on the Sender unit for about 5 seconds.



7. Press the **OK** button to continue adding the Sender unit.



**NOTE:** When pairing multiple Senders, it is recommended that you rename the ones already linked to avoid confusion.

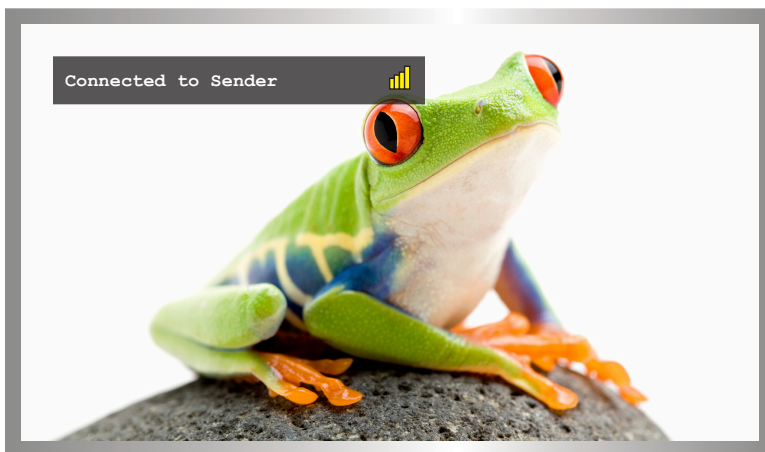
## OPERATING THE WIRELESS FOR HDMI

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As the Sender unit is added to the *Wireless for HDMI* network, a progress bar will be displayed:



After a few moments the source signal connected to the additional Sender unit will be displayed:



8. If desired, repeat steps 1 - 7 to add another Sender unit to the *Wireless for HDMI* network.



**TIP:** Use the **ADD** button (see page 9) on the IR Remote Control to bypass the Setup menu and jump directly to registering the Sender unit.

# OPERATING THE WIRELESS FOR HDMI

## Renaming Sources

By default, each Sender unit is assigned the name “Sender”. This can be confusing when multiple Sender unit are used. However, this identifier can be changed to reflect, for example, the source to which each Sender unit is connected.

1. Point the IR Remote Control at the Receiver unit, press the **MENU** button, select **Modify Video Source Name**, then press the OK button.



2. Select the source to rename from the menu by using the cursor keys:



## OPERATING THE WIRELESS FOR HDMI

- The **Rename Video Source Name** menu will be displayed, along with the selected Source.

Use the ▲ and ▼ cursor keys to change the highlighted character. The ▲ key moves forward within the list of available characters and the ▼ key moves backward through the list. The list of available characters is listed in the table below. The first character (first row, first column) is a space and can be used anywhere in the name. The maximum length of the Source name cannot exceed nine characters, including any spaces.

**Figure 2:**  
Available characters for source naming

	0	1	2	3	4	5	6	7	8	9	a	b	c	d
e	f	g	h	i	j	k	l	m	n	o	p	q	r	s
t	u	v	w	x	y	z	A	B	C	D	E	F	G	H
I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
X	Y	Z												



Use the ◀ and ▶ cursor keys to select the character in the name to be changed.

## OPERATING THE WIRELESS FOR HDMI

4. After the video source has been renamed, press the **OK** button to save the changes.

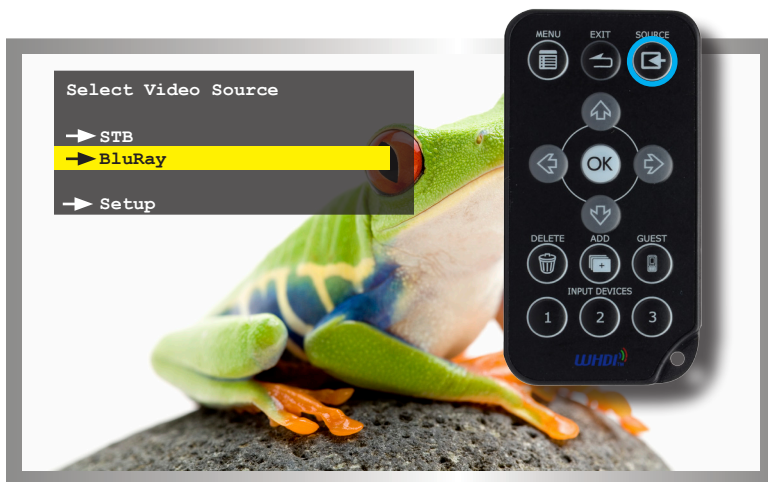


## OPERATING THE WIRELESS FOR HDMI

### *Switching between Sources*

Once two or more Sender units have been connected to a Receiver unit, use the IR Remote Control unit to switch between each source.

1. Point the IR Remote Control at the Receiver unit and press the **Source** button. The **Select Video Source** menu will be displayed.



2. Use the **Cursor** buttons on the IR Remote Control to select the desired source.

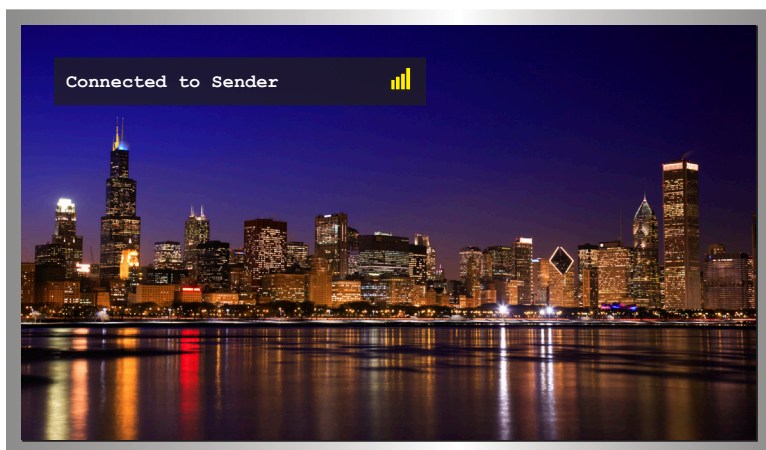


## OPERATING THE WIRELESS FOR HDMI

- Once the desired source has been selected, press the OK button.



- The screen will go blank momentarily and the “Connecting to...” status message will be displayed, indicating that the Receiver unit is switching to the selected Sender unit (source).
- After a few moments, the selected source signal will be displayed.



**TIP:** Use the **INPUT DEVICES** buttons (see page 9) on the IR Remote Control to bypass the Select Video Source menu and directly switch to another Sender unit.

# OPERATING THE WIRELESS FOR HDMI

## Deleting Sources

If a Sender unit (source) will no longer be necessary, it can be removed from the *Wireless for HDMI* network.

1. Point the IR Remote Control at the Receiver unit and press the **MENU** button.



2. Select **Remove Video Source** from the Setup menu, using the cursor buttons on the IR Remote Control.





## OPERATING THE WIRELESS FOR HDMI

3. Click the **OK** button to confirm the selection.
4. The *Chose Source to Remove* menu will be displayed.
5. Select the source to be removed and press the **OK** button.



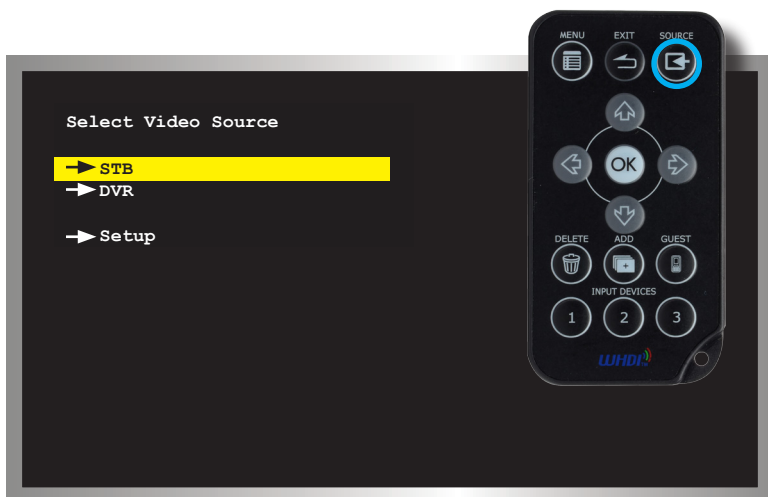
6. Press the **OK** button to confirm the removal of the selected device.



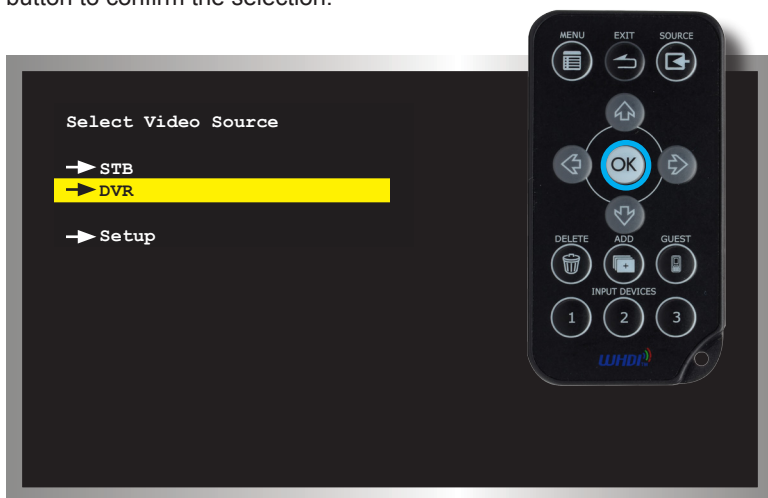
7. After a few seconds, the screen will go blank.

## OPERATING THE WIRELESS FOR HDMI

- Press the **SOURCE** button to display the *Select Video Source* menu.



- Select the desired source using the cursor buttons. Then, press the **OK** button to confirm the selection.

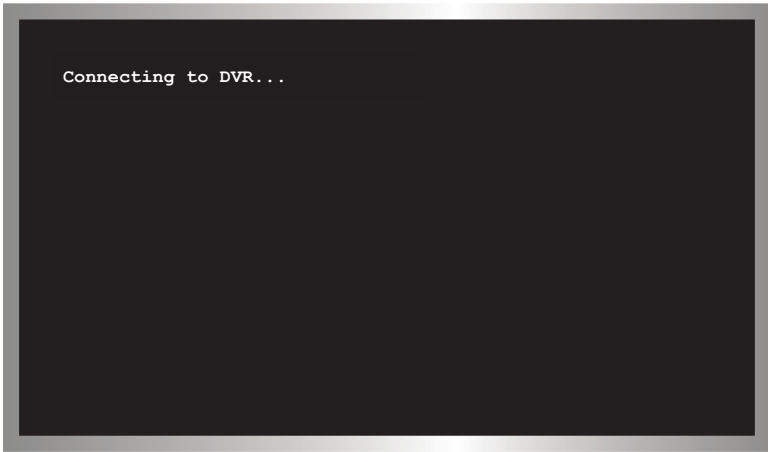


**TIP:** Use the **DELETE** button on the IR Remote Control to jump directly to the Select Video Source menu, when deleting sources.

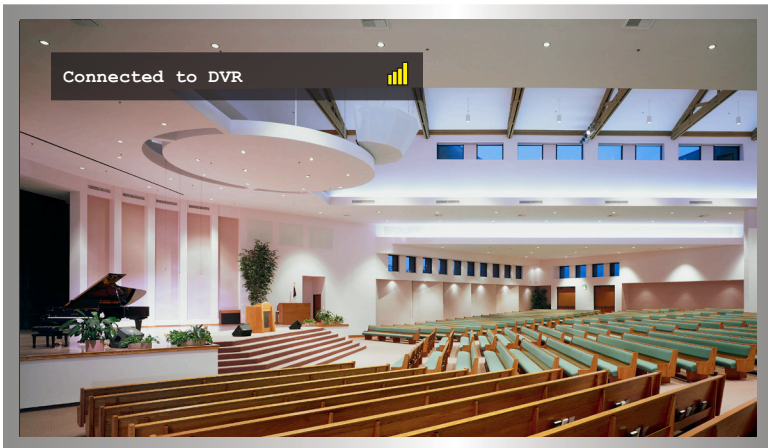
## OPERATING THE WIRELESS FOR HDMI

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10. The “Connecting to...” status message will be displayed:



11. After a few moments, the selected source signal will be displayed.



**NOTE:** The video source will always need to be selected, even if the source currently being viewed is not deleted.

## OPERATING THE WIRELESS FOR HDMI

### *Disconnecting the Wireless Link*

The *Wireless for HDMI* network can be completely disconnected, if necessary. This can be used in order to restrict the source from being viewed.

1. Point the IR Remote Control at the Receiver unit and press the **MENU** button.
2. Select **Disconnect Wireless Link** and press the **OK** button.



3. After a few seconds, the screen will go blank. A status message, indicating that the wireless has been turned off, will be displayed. The *Wireless for HDMI* network is now in *standby mode*.



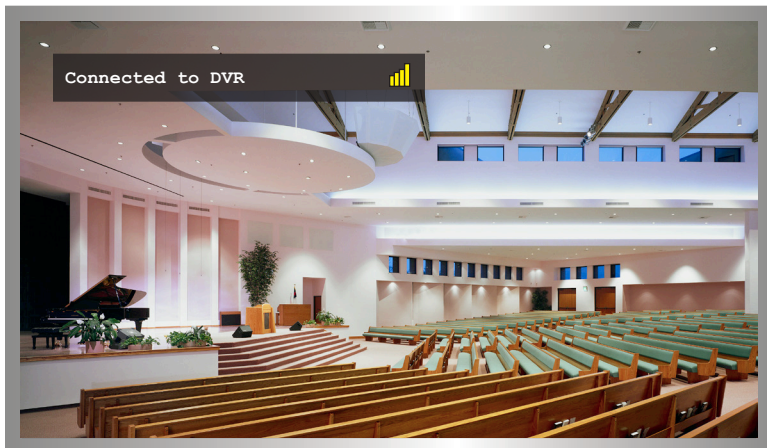
# OPERATING THE WIRELESS FOR HDMI

## *Reconnecting the Wireless Link*

1. Press the **Source** button on the IR Remote Control. The “Connecting to...” message will be displayed:



2. After a few seconds, the wireless link will be restored and the source signal will be displayed.



# OPERATING THE WIRELESS FOR HDMI

## Power-Down Mode

The *Wireless for HDMI* can be powered-down when not in use.

1. Point the IR Remote Control at the Receiver unit and press the **GUEST** button.

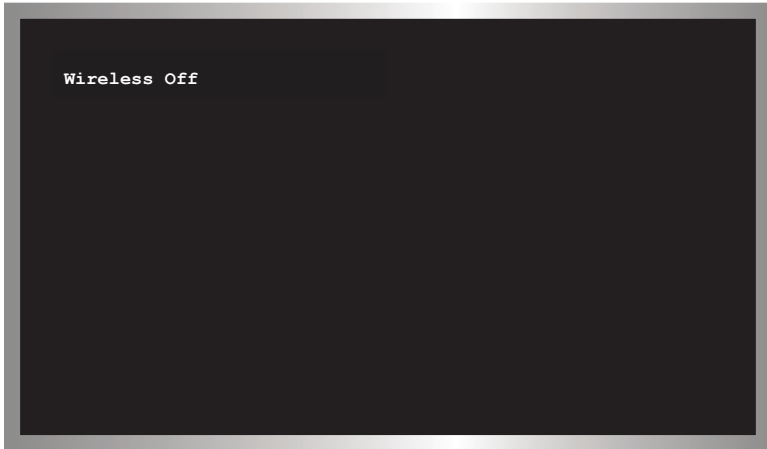


2. After a few seconds, the screen Receiver and Sender unit(s) will power-down. A status message, indicating that the *Wireless for HDMI* has been powered-down, will be displayed.



## OPERATING THE WIRELESS FOR HDMI

3. After the *Wireless for HDMI* has been successfully powered-down, the "Wireless Off" message will be displayed on the screen.



### Powering-Up after a Power-Down

1. Point the IR Remote Control at the Receiver unit and press the **GUEST** button.
2. The "Connecting to..." message will be displayed.
3. After a few moments, the selected source signal will be restored.



## SPECIFICATIONS

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Operating Frequency.....	5 GHz
Supported resolutions.....	480p to 1080p
Video Input Connector (Sender).....	(1) HDMI Type A, 19-pin, male
Video Output Connector (Receiver).....	(1) HDMI Type A, 19-pin, female
USB Connector (Sender / Receiver).....	(1) Mini-B (Receiver - factory use only)
Power Supply (Sender).....	(1) 5V / 1A DC with USB jack (can also use powered USB port)
Power Supply (Receiver).....	(1) 5V / 2A DC
Power Consumption (Sender / Receiver).....	3W (max.) / 8W (max.)
Dimensions (W x H x D) (Sender).....	1.2" x 0.6" x 3.9" (29mm x 14.5mm x 98mm)
Dimensions (W x H x D) (Receiver).....	5.83" x 0.8" x 3.8" (148mm x 20mm x 96mm)
Shipping Weight.....	2.0 lbs. (0.9 kg)

All features and specifications are subject to change without notice.



## WARRANTY

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Gefen warrants the equipment it manufactures to be free from defects in material and workmanship.

If equipment fails because of such defects and Gefen is notified within two (2) years from the date of shipment, Gefen will, at its option, repair or replace the equipment, provided that the equipment has not been subjected to mechanical, electrical, or other abuse or modifications. Equipment that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for ninety (90) days from the day of reshipment to the Buyer.

This warranty is in lieu of all other warranties expressed or implied, including without limitation, any implied warranty or merchantability or fitness for any particular purpose, all of which are expressly disclaimed.

1. Proof of sale may be required in order to claim warranty.
2. Customers outside the US are responsible for shipping charges to and from Gefen.
3. Copper cables are limited to a 30 day warranty and cables must be in their original condition.

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. The technical information contained herein regarding the features and specifications is subject to change without notice.

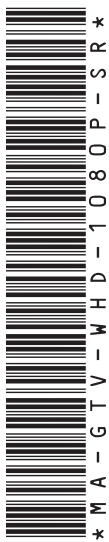
For the latest warranty coverage information, refer to the Warranty and Return Policy under the Support section of the Gefen Web site at [www.gefen.com](http://www.gefen.com).

## PRODUCT REGISTRATION

**Please register your product online by visiting the Register Product page under the Support section of the Gefen Web site.**







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This product uses UL or CE listed power supplies.